Applicants: Yerushalmi-Rozen et al.

Application No.: 10/667,204

Examiner: McCracken

**Amendments to the Claims** 

1. (Currently Amended) A method for the preparation of an aqueous, stable suspension of

essentially single, non-tangled carbon nanotubes, comprising:

adding carbon nanotubes to a water solution of a hydrophilic polymeric material selected

from the group consisting of polysaccharides and polypeptides;

maintaining a mass ratio of said polymeric material to said <u>carbon</u> nanotubes in a range

between 0.05 to 20; and

sonicating said solution including said carbon nanotubes wherein the time of said sonicating

comprises 5 to 20 minutes.

2. (Canceled)

3. (Currently Amended) A method for the preparation of dry non-tangled carbon nanotubes

comprising: i) the preparation of an aqueous, stable suspension of carbon nanotubes according to

claim 1; and ii) the removal of water from said suspension.

4. (Original) A method of claim 3, wherein the removal of water comprises evaporation,

lyophilization, or filtration.

5. (Previously Presented) A method according to claim 1, wherein a sum of a concentration

of said carbon nanotubes and a concentration of said polymeric material in the suspension is up to

65% by weight.

6. (Canceled)

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7. (Currently Amended) A method according to claim 1, wherein the polymer said

polymeric material is selected from the group consisting of gum arabic, carrageenan, pectin,

polygalacturonic acid, alginic acid, chitosan, combinations thereof and derivatives thereof.

8. (Currently Amended) A method according to claim 7, wherein the polymer said

polymeric material is gum arabic.

9. (Original) A stable suspension of carbon nanotubes, prepared according to claim 1.

10. (Currenly Amended) A powder of carbon nanotubes, comprising a polymer polymeric

material in admixture therewith, obtained by the method according to claim 3.

11. (Currently Amended) The powder of claim 10, wherein the polymer said polymeric

material is adsorbed on the nanotubes forming an adhesive interface between said carbon nanotubes

and said polymeric material.

12. (Withdrawn) Use of the carbon nanotubes of claim 9 for creating a required conductive

pattern, comprising: i) providing a solid support, and ii) depositing said carbon nanotubes onto a

said solid support in the required conductive pattern.

13. (Withdrawn) Use of the carbon nanotubes of claim 9 as a template for the growth of

crystals of silica, or a hybrid material of silica with carbon nanotubes, comprising: i) providing a

silica containing material, and ii) contacting said material with said carbon nanotubes.

14. (Withdrawn) Use of the carbon nanotubes of claim 9 as a reinforcing agent for

polymeric matrices, comprising: i) providing a silica containing material, and ii) contacting said

material with said carbon nanotubes.

15. (Withdrawn) Use of the carbon nanotubes according to claim 14, wherein the polymeric

matrix is elastomer.

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16. (Withdrawn) Use of the carbon nanotubes of claim 9 as an electric conductive

connector between two electronic devices, comprising: i) providing two electronic devices, and ii)

depositing said carbon nanotubes between said device to create a continuous pattern.

17. (Withdrawn) Use according to claim 16, wherein at least one of the devices is a

nanoelectronic device.

18. (Withdrawn) Use of the carbon nanotubes of claim 9 in a technique that comprises the

formation of a thin layer on a surface, comprising: i) providing a solid surface, and ii) depositing

said carbon nanotubes onto said surface in a pattern enabling at least a partial cover of said surface

by a layer of said nanotubes.

19. (Withdrawn) Use according to claim 18, wherein the technique is printing.

20. (Withdrawn) Use according to claim 18, wherein the technique is coating.

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